NATIONAL TRANSPORTATION SAFETY BOARD DEPARTMENT OF TRANSPORTATION

WASHINGTON, D.C. 20591

A-68-27

October 9, 1968

Mr. David D. Thomas Acting Administrator Federal Aviation Administration Department of Transportation Washington, D. C. 20590

Dear Mr. Thomas:

The Board has been made aware of certain details involving a USAF KC-135 accident near Castle AFB California, on July 30, 1968. The aircraft incurred a vertical fin separation with evidence of fatigue cracks being found on the aft left-hand body-to-fin attach fitting.

To the best of our knowledge, periodic inspections as required by your Airworthiness Directive 66-16-1, although not required by the USAF, would not have detected these fatigue cracks, due to the rather premature failure. Although there are mitigating circumstances resulting from the particular operational utilization of this aircraft, presumably incurring much higher andmore frequent vertical fin loadings than aircraft in our civil fleet, it is still conceivable that certain aircraft in our civil fleet might encounter greater than normal amounts of atmospheric turbulence which could result in an early onset of fatigue cracking.

Since there are a substantial number of B707/720 aircraft which have not been retrofitted with the increased strength fittings, the Board recommends that the Administrator revise Airworthiness Directive 66-16-1 to require at least equivalent inspection times as reflected by Boeing Service Bulletin 2399, Revision 8. The Board further suggests that consideration be given to expediting the aforementioned retrofit program by requiring early compliance with Boeing Service Bulletin 2422, "Aft Fin Terminal Fitting and Bulkhead Assembly Replacement."

Our investigators have discussed this action with Flight Standards personnel in Washington, cognizant FAA personnel in your Western Region, and personnel representing the manufacturer. FAA personnel contacted in your Western Region advised that they have been contemplating AD

action to provide for a more frequent inspection of this fitting. Notwithstanding the attention which your Western Region staff are giving to this, we believe that such action should be implemented without delay. Our technical staff is available to provide you with further information or assistance as desired.

Sincerely yours,

Original signed by Joseph J. O'Connell, Jr.

Joseph J. O'Connell, Jr. Chairman